

THE IDENTITY OF *ALOE RIVAE* BAK.

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(With Plate VI.)

The identity of *A. Rivae* has remained doubtful since Riva collected his material in south-western Ethiopia in 1893, and this species does not appear to have been collected again since then.

The type locality is "Somaliland: Gobbo Duaya, Riva n. 1509, 16 Oct. 1893." Also included under *A. Rivae* is: "Dry places near Coromme, in the north-west Boran, Riva n. 1766, 7 Nov. 1893." Both sheets (of which I have photographs) are in Florence.

Riva left Dolo, and travelled westwards up the valley of the Daua Parma River in April 1893, and arrived at Burgi. In September he was between the Jam Jam, and from there went up to Coromme and the source of the river Sagan in which region he remained until December. Coromme lies to the south-west of Agere Mariam (Alghe) at approx. 5°30'N. 38°04'E., while Burgi is further to the south-west at approx. 5°23'N. 37°50'E., northwards of Yavello in South-western Ethiopia. Gobbo Duaya (type locality) could not be traced on any map, but from the date, 16 October 1893, it appears to be somewhere in or near the Burgi-Coromme area.

In September 1953 (with Mr. P. R. O. Bally, botanist, Coryndon Museum Nairobi) I visited Southern Ethiopia for the express purpose of investigating *A. Rivae* and other Aloe species.

I reached Agere Mariam and set off for Coromme, but was compelled to turn back owing to the indescribably bad condition of the track. Neither Missionaries nor Ethiopian Police had ever heard of Gobbo Duaya, the type locality. Fortunately I found numbers of flowering plants further south, which fit the description and compare favourably with photographs of the type material. The species can now be more fully described, and flowering specimens figured as they occur wild. The largest numbers were found at Mega, flowering in early September, on lower slopes of the British Consulate hill to the east of the old Italian Fort; also 3—5 miles north of Mega, and in lower country 10 miles south-east of Mega. Also occurs at and near Yavello, about 66 miles north of Mega.

In *A. Rivae* the stem is usually short, or procumbent and up to 60 cm. long. When planted closely in hedges demarcating fields, stems may reach

1 met. in height. The leaves are tough and leathery, even the pulp being difficult to cut. At Mega, numbers of plants were observed on graves.

A. Rivae has an affinity with *A. secundiflora* Engler, but the flowers are not minutely white flecked.

The description is based on numbers of plants flowering on 7 September, 1953, near Mega, c. 4°05'N., 38°20'E., alt. 6,200 ft.

Plant succulent, solitary or in small groups.

Stem usually short, sometimes procumbent and up to 60 cm. long.

Leaves leathery, about 20, densely rosulate, rather compact, arcuately erectly spreading, somewhat deltoid, up to 50 cm. long, up to 17 cm. broad at base, 2—3 cm. thick, gradually attenuate, the apex a spine; *upper surface* dull olive-green to brownish-green, flat low down, slightly canaliculate towards apex, of uniform colour throughout; *lower surface* rounded and of similar colour; *margins* reddish tinged, armed with firm semi-cartilaginous teeth which are reddish-brown and horny at apex, deltoid, more crowded near base, more distant upwards, about 4 mm. long, 10—15 mm. apart, the interspaces straight, obsolescent near apex. *Sap* dries deep purple.

Inflorescence a many-branched pyramidal panicle, about 60—70 cm. high; usually 2, simultaneous or consecutive.

Peduncle plano-convex and 2 cm. broad at base, divaricately about 12-branched, the lowest of which a panicle of 6—8 branches, producing a total of 45—50 racemes, lowest branches subtended at base by a broadly and shortly ovate-acute bract 15 mm. broad, 7 mm. long, thin, scarious 7—10-nerved.

Racemes laxly flowered, averaging 10 cm. long, 7 cm. diam., usually oblique with the flowers subsecund, the buds dull scarlet, grey-tipped and with a bloom, open flowers spreading horizontally to nutant.

Brac's very small, ovate-acute, 2—4 mm., long, 2—3 mm. broad, dirty white, thin, scarious, 1—3-nerved.

Pedicels lowest average 12 mm. long.

Perianth scarlet with a bloom, averaging 33 mm. long, cylindric-trigynous, basally flat, 10 mm. diam. across the ovary, thence trigynously indented and narrowing slightly to the throat with the mouth wide open; *outer segments* free for 13 mm. with broad border, 3-nerved, the apices subacute and much spreading; *inner segments* themselves free but dorsally adnate to the outer to near the middle, the upper third broader than the outer, pale, with prominent median nerve, the apices more obtuse and more spreading than the outer, and markedly brown-edged.

Filaments filiform-flattened, the 3 inner narrower and lengthening before the 3 outer with their *anthers* in turn exerted 4 mm.

Style yellow with *stigma* at length exerted 5 mm.

Ovary pale olive-green, 8 mm. long, 3 mm. diam.

ACKNOWLEDGMENT.

This is one of the species investigated as a result of a travelling grant from the South African Council for Scientific and Industrial Research which enabled me to visit Ethiopia and Somalia for that purpose.



FIG. 1.

Aloe Rivoa Bak.

PLATE VI.



FIG. 2.

FIG. 1. Plant fl. 8 September, 1953, at Mega, Borana,
S. Ethiopia. Height 90 cm.

FIG. 2. Flowers 1/1, from bud to fruit stage.